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EXAMINER	
RAO, ANAND SHASHIKANT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/621,259	HANNUKSELA ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/07 has been entered.

2. Applicant's arguments with respect to claims 1-24 as filed on 3/16/07 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells (US Patent: 6,310,915: hereinafter referred to as "Wells") in view of Viscito et al., (US 2004/0005007 A1 hereinafter referred to as "Viscito").

Wells discloses a method (Wells: column 16, lines 35-67; column 17, lines 1-10) of concealing an error in a frame (Wells: column 12, lines 45-67) of a video sequence, the video sequence comprising at least a first scene and a second scene (Wells: column 13, lines 40-56),

the second scene having a scene transition from the first scene, wherein the scene transition comprises a number of frames and the scene transition is one of a number of types (Wells: column 10, lines 65-67), said method comprising: identifying the type of scene transition (Wells: column 10, lines 10-20) and applying an error concealment procedure to conceal an error in a frame belonging to the transition based on the identified type of scene transition (Wells: column 12, lines 45-67), as in claim 1. However, Wells fails to disclose the application of the method in a standalone decoding process as in the claim. Viscito discloses a hypothetical reference decoder for compressed image and video and associated method (Viscito: paragraph [0017], lines 1-8) which discloses using scene changes to watch for overflow/underflow conditions (Viscito: paragraph [0080], lines 1-9) and maintain low delay in picture presentation (Viscito: paragraph [0081], lines 1-9). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the Wells scene change detection method into the Viscito for use with a decoding process in order to allow for the Viscito decoding process to accurately detect scene changes and further avoid overflow/underflow situations and maintain low delay times. The Wells method, as applied in a decoding process as shown by Viscito, has all of the features of claim 1.

Regarding claim 2, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein the identified type of scene transition is a scene cut (Wells: column 6, lines 20-25), as in the claim.

Regarding claim 3, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein if a whole picture belonging to the scene cut is lost, the lost picture is not concealed (Wells: column 13, lines 1-20), as in the claim.

Regarding claim 4, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein if part of a picture belonging to the scene cut is lost or corrupted, a spatial error concealment algorithm is applied to conceal the lost or corrupted part of the picture (Wells: column 11, lines 50-55), as in the claim.

Regarding claim 5, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein the identified type of scene transition is a gradual scene transition (Wells: column 10, lines 65-67), as in the claim.

Regarding claims 6-8, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein the scene transition is a fade, dissolve, or wipe (Wells: column 10, lines 10-20), as in the claims.

Regarding claim 9, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein if a whole picture belonging to the gradual transition is lost or corrupted (Wells: column 13, lines 40-52), a spatio-temporal (Wells: column 11, lines 50-55 and 63-67; column 12, lines 1-9) error concealment algorithm (Wells: column 12, lines 45-67; column 13, lines 1-30) is applied to conceal the lost or corrupted part of the picture (Wells: column 13, lines 40-55), as in the claim.

Regarding claim 10, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein if part of a picture belonging to the gradual transition is lost or corrupted (Wells: column 15, lines 5-40), a spatio-temporal (Wells: column 11, lines 50-55 and 63-67; column 12, lines 1-9) error concealment algorithm (Wells: column 12, lines 45-67; column 13, lines 1-30) is applied to conceal the lost or corrupted part of the picture (Wells: column 13, lines 40-55), as in the claim.

Regarding claim 11, the Wells method, as applied in a decoding process as shown by Viscito, discloses the of use wherein the information indicative of the identified screen transistion is provided to a decoder (Viscito: paragraph [0080], lines 1-9) in supplemental enhancement information messages (Viscito: paragraph [0045], lines 5-11), as in the claim.

Regarding claim 12, the Wells method, as applied in a decoding process as shown by Viscito, discloses wherein said information indicative of the identified scene transition includes an indication of a scene transition type (Wells: column 10, lines 15-20), as in the claim.

Regarding claim 13, the Wells method, as applied in a decoding process as shown by Viscito, discloses said information indicative of the identified scene transition is provided for each frame belonging to the transition (Wells: column 10, lines 50-67; column 11, lines 1-12), as in the claim.

Wells discloses video coding device (Wells: figure 1) for encoding a video sequence into a data stream, the video sequence comprising at least a first scene and a second scene (Wells: column 13, lines 40-56) and having a scene transition from the first scene, wherein the scene transition comprises a number of frames and the scene transition is one of a number of types (Wells: column 10, lines 65-67), said video coding device comprising: means for identifying frames associated with the transition (Wells: column 10, lines 10-20); and means for providing information about the type of transition (Wells: column 12, lines 45-67), as in claim 14. However, Wells fails to a module for providing information for use in a decoding process as in the claim. Viscito discloses a hypothetical reference decoder for compressed image and video and associated method (Viscito: paragraph [0017], lines 1-8) which discloses using scene changes to watch for overflow/underflow conditions (Viscito: paragraph [0080], lines 1-9) and

maintain low delay in picture presentation (Viscito: paragraph [0081], lines 1-9). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the Wells scene change detection module into the Viscito decoder in order to allow for the Viscito decoder to accurately detect scene changes and further avoid overflow/underflow situations and maintain low delay times. The Wells coder, as applied in a decoding process as shown by Viscito, has all of the features of claim 14.

Regarding claim 15, the Wells coder, as applied in a decoding process as shown by Viscito, discloses the of use wherein the information indicative of the identified screen transistion is provided to a decoder (Viscito: paragraph [0080], lines 1-9) in supplemental enhancement information messages (Viscito: paragraph [0045], lines 5-11), as in the claim.

Regarding claim 16, the Wells coder, as applied in a decoding process as shown by Viscito, discloses wherein said information indicative of the identified scene transition includes an indication of a scene transition type (Wells: column 10, lines 15-20), as in the claim.

Wells discloses a coder including a video decoding device (Wells: column 7, lines 35-45) for decoding a video sequence from a data stream, the video sequence comprising at least a first scene and a second scene (Wells: column 10, lines 40-56) and having a scene transition from the first scene, wherein the scene transition comprises a number of frames and the scene transition is one of a number of types (Wells: column 10, lines 65-67), said video coding device comprising: means for receiving the data stream (Wells: column 7, lines 30-35); and an error concealment algorithm for concealing an error in a frame belonging to the transition based on the type of scene transition (Wells: column 12, lines 45-67; column 13, lines 1-30), as in claim 17. However, Wells fails to a module for providing information for use in a decoding process as in the claim.

Viscito discloses a hypothetical reference decoder for compressed image and video and associated method (Viscito: paragraph [0017], lines 1-8) which discloses using scene changes to watch for overflow/underflow conditions (Viscito: paragraph [0080], lines 1-9) and maintain low delay in picture presentation (Viscito: paragraph [0081], lines 1-9). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the Wells scene change detection module into the Viscito decoder in order to allow for the Viscito decoder to accurately detect scene changes and further avoid overflow/underflow situations and maintain low delay times. The Wells coder, as applied in a decoding process as shown by Viscito, has all of the features all of the features of claim 17.

Regarding claim 18, the Wells coder, as applied in a decoding process as shown by Viscito, has the of use wherein the information indicative of the identified screen transistion is provided to a decoder (Viscito: paragraph [0080], lines 1-9) in supplemental enhancement information messages (Viscito: paragraph [0045], lines 5-11), as in the claim.

Regarding claim 19, the Wells coder, as applied in a decoding process as shown by Viscito, has all of the features wherein if a whole picture belonging to the gradual transition is lost or corrupted (Wells: column 13, lines 40-52), a spatio-temporal (Wells: column 11, lines 50-55 and 63-67; column 12, lines 1-9) error concealment algorithm (Wells: column 12, lines 45-67; column 13, lines 1-30) is applied to conceal the lost or corrupted part of the picture (Wells: column 13, lines 40-55), as in the claim.

Regarding claim 20, the Wells coder, as applied in a decoding process as shown by Viscito, has wherein if part of a picture belonging to the gradual transition is lost or corrupted (Wells: column 15, lines 5-40), a spatio-temporal (Wells: column 11, lines 50-55 and 63-67;

column 12, lines 1-9) error concealment algorithm (Wells: column 12, lines 45-67; column 13, lines 1-30) is applied to conceal the lost or corrupted part of the picture (Wells: column 13, lines 40-55), as in the claim.

Regarding claim 21, the Wells coder, as applied in a decoding process as shown by Viscito, has wherein the type of scene transition is a scene cut and a part of a picture belonging to the scene cut is lost or corrupted, said error concealment algorithm comprising a spatial error concealment algorithm for concealing error in the picture (Wells: column 11, lines 50-55), as in the claim.

Regarding claim 22, the Wells coder, as applied in a decoding process as shown by Viscito, discloses wherein the type of scene transition is a scene cut and a whole picture belonging to the scene cut is lost or corrupted, said error concealment algorithm adapted to ignore the lost or corrupted picture (Wells: column 13, lines 1-30), as in the claim.

Wells discloses a coder containing a video decoding device (Wells: column 7, lines 35-45) for decoding a video sequence from an encoded video data stream, the video sequence comprising at least a first scene and a second scene (Wells: column 10, lines 40-56) and having a scene transition from the first scene, wherein the scene transition comprises a number of frames and the scene transition is one of a number of types (Wells: column 10, lines 65-67), said video coding device comprising: means for receiving the encoded data stream (Wells: column 7, lines 30-35); means for retrieving information from the received encoded video data stream to identify the type of scene transition (Wells: column 10, lines 60-67; column 11, lines 1-5); and means for concealing an error in a frame belonging to the transition based on the information indicative of the identified type of scene transition (Wells: column 12, lines 45-67; column 13, lines 1-30), as

in claim 23. However, Wells fails to a module for providing information for use in a decoding process as in the claim. Viscito discloses a hypothetical reference decoder for compressed image and video and associated method (Viscito: paragraph [0017], lines 1-8) which discloses using scene changes to watch for overflow/underflow conditions (Viscito: paragraph [0080], lines 1-9) and maintain low delay in picture presentation (Viscito: paragraph [0081], lines 1-9). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the Wells scene change detection module into the Viscito decoder in order to allow for the Viscito decoder to accurately detect scene changes and further avoid overflow/underflow situations and maintain low delay times. The Wells coder, as applied in a decoding process as shown by Viscito, has all of the features all of the features of claim 23.

Wells discloses video encoding device (Wells: figure 1) for encoding a video sequence into a data stream, the video sequence comprising at least a first scene and a second scene (Wells: column 13, lines 40-56) and having a scene transition from the first scene, wherein the scene transition comprises a number of frames and the scene transition is one of a number of types (Wells: column 10, lines 65-67), said video coding device comprising: means for identifying frames associated with the transition (Wells: column 10, lines 10-20); and means for providing information about the type of transition in the encoded video data stream (Wells: column 12, lines 45-67), as in claim 24. However, Wells fails to a module for providing information for use in a decoding process as in the claim. Viscito discloses a hypothetical reference decoder for compressed image and video and associated method (Viscito: paragraph [0017], lines 1-8) which discloses using scene changes to watch for overflow/underflow conditions (Viscito: paragraph [0080], lines 1-9) and maintain low delay in picture presentation

(Viscito: paragraph [0081], lines 1-9). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the Wells scene change detection module into the Viscito decoder in order to allow for the Viscito decoder to accurately detect scene changes and further avoid overflow/underflow situations and maintain low delay times. The Wells coder, as applied in a decoding process as shown by Viscito, has all of the features all of the features of claim 24.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
May 25, 2007